Where Do They Go from Here?

Determinants of Medicare Post-Acute Care: Skilled Nursing Facilities or Home Under Home Health Care

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Executive Summary

Post-acute care expenditures for the elderly increased rapidly during the 1990s. In response, the federal government passed the Balanced Budget Act of 1997 (BBA), which significantly changed the payment system for Medicare patients. Subsequent General Accounting Office (GAO) and Inspector General Office (IGO) investigations on the impact reimbursement rate changes could have on a skilled nursing facility's (SNF) case-mix concluded that hospital discharge and SNF admissions practices had indeed changed as a result of the BBA. In turn, these changes impacted the home health industry, which experienced a significant decline in the number of patients served, thereby reducing revenue earned, some portion of which would have gone to support fixed costs.

The Balanced Budget Refinement Act (BBRA) and the Medicare, Medicaid, & SCHIP Benefits Improvement and Protection Act (BIPA) of 2000 have since implemented "give backs" to the SNF and home health industries. Among the "give backs" for SNFs are rehab payment "add-ons" that have been redistributed to include all 14 rehab classifications, which could continue to make it lucrative for SNFs to accept short-term rehabilitative patients. To provide some relief for the home health industry, BIPA delayed federal funding cuts of 15% until October 2002. While these changes in provisions may have positively impacted the industry, they are likely temporary due to sunset clauses. In March 2002 President George W. Bush released his FY 2003 budget proposal that containing a scheduled 17% cut in Medicare reimbursement rates. Originally mandated in the BBA, this scheduled cut was temporarily delayed by BBRA and BIPA legislation until October 2002. Pending reauthorization of the two latter bills by Congress, the cuts will occur. This uncertainty makes planning within the industry challenging. According to the national Medicare study released by the American Health Care Association and the Alliance for Quality Nursing Home Care, the impact of the Medicare "cliff" is expected to be felt most among seniors living in Massachusetts and nine other states.

Drawing on hospital submitted discharge data, concerning those age 65 and older, the report of the Massachusetts Division of Health Care Finance and Policy (DHCFP) found that a patient's disposition was determined less by type of diagnosis alone, and more by a combination of variables including diagnosis, age and acuity level. Shifts in total elderly hospital discharges, elderly rehab discharges and total number of SNF Level I beds were the strongest indicators of changing practices as a result of the BBA. First, the data indicated a significant increase in total elderly discharges to SNFs and a decline in the patients discharged home under home health care (HHC) between 1996 and 2000. Second, while the SNF industry experienced a number of facility and bed closures, the number of Medicare beds increased two-fold. Last, SNFs experienced an increase in elderly patients with a major joint and limb reattachment of a lower extremity [DRG 209] while home health care discharges for those with this diagnosis decreased significantly. The median total hospital charges for these patients were also lower for those placed in SNFs versus home under HHC. This suggests that the placement was determined less by acuity level or age, but possibly by reimbursement rates that pay more for less costly, short-term rehabilitative patients.

Introduction

During the 1990s, rapid growth in spending for post-acute care caused policy makers at both the national and state level to examine the characteristics of Medicare patients[1] who use such services.[2] In Massachusetts alone, the total number of elderly discharged from acute hospitals rose 6% between 1996 and 2000. **(See Table 1)** In 1996, 19.4% of elderly patients were discharged to skilled nursing facilities (SNFs). By 2000, this figure increased to 22%. Conversely, the percent of elderly patients discharged to home under home health care (HHC) decreased slightly between 1996 and 2000 to 17.2%. **(See Figure 1)** While these figures illustrate a gradual shift in post-acute care to SNFs, health care analysts have observed a great overlap in the type of patients discharged to SNFs and home under HHC.[3] Thus, it is valuable for policy makers to examine the contributing factors that affect elderly patient disposition to a SNF or home under home health care, such as type of diagnosis, age, marital status, and availability of family caregivers.

The 1997 federal Balanced Budget Act (BBA) altered both the payment system by which medical services for Medicare patients are billed, as well as the reimbursement rates for specific services provided to Medicare patients. In effect, these regulations have made it more lucrative for SNFs to accept short-term rehabilitative patients from acute care hospitals and less lucrative to care for long term patients with extensive medical needs such as dialysis and respirators.[4] Representatives from the long-term care community in Massachusetts suggest that these changes have drastically impacted providers of elderly care. The full impact of the BBA is difficult to assess since the payment system changes (i.e., federal to facility specific per diem ratio) are distributed over a number of years and some mandates have been modified or repealed under the Balanced Budget Refinement Act (BBRA) and the Medicare, Medicaid, & SCHIP Benefits Improvement and Protection Act (BIPA) of 2000.[5] [6]

As the late 1990s have demonstrated, the health care environment could change yet again with future legislative mandates. It has become increasingly important for policymakers to be aware of how differences in beneficiary characteristics can contribute to a patient's access to appropriate care.[7] This paper seeks to examine with detail the elderly population requiring post-acute services, and compares and contrasts the SNF and HHC patient profiles in 2000 to comparable patients in 1996, the last year before the BBA.

Table 1: Total Elderly Discharges from Acute Hospitals to SNFs and Home under HHC

	1996		2000	
Total Number of All Hospital Discharges (over 65+)	260,984		276,715	
Total Number of Elderly Hospital Discharges to Home Health	51,868	19.9%	47,586	17.2%
Total Number of Elderly Hospital Discharges to SNFs	50,504	19.4%	60,782	22.0%

[1] For the purposes of this report, all references to the elderly denote those over 65 years of age on Medicare (both fee-for-service and managed care plans).

[2] This report analyzes data from the 1996 and 2000 DHCFP Hospital Discharge Databases (HDD) on patient characteristics, length of stay, and total charges for patients discharged from acute hospitals to SNFs and home under HHC. We also used Massachusetts nursing home cost reports to determine the aggregate number of SNFs from 1996 and 2000 and licensed bed distribution by type.

[3] Liu, K., et. al. "Medicare's Post-Acute Care Benefit: Background, Trends and Issues to be Faced." The Urban Institute. January 1999.

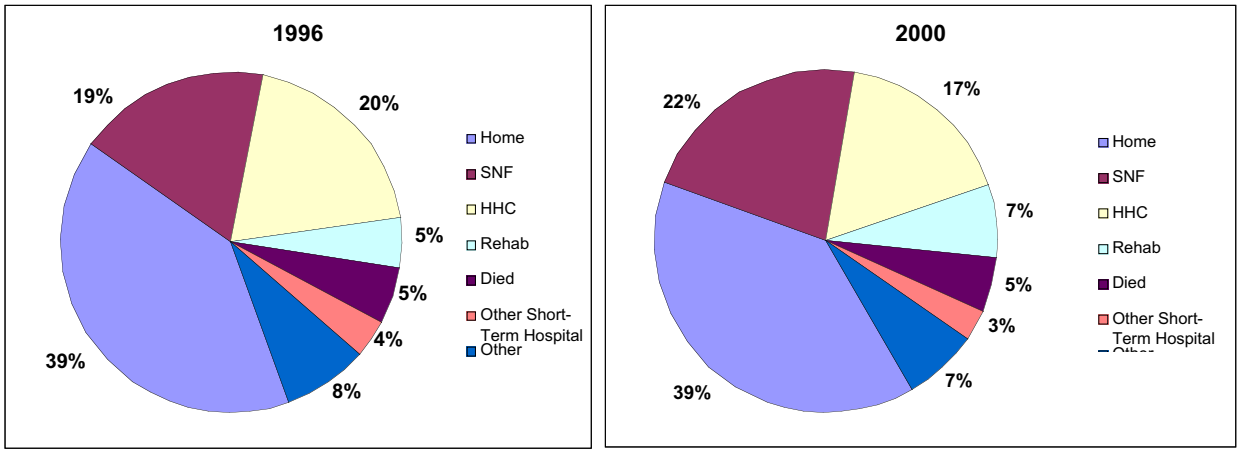
[4] General Accounting Office, "Skilled Nursing Facilities: Medicare Payment Changes Require Provider Adjustments but Maintain Access." December 14, 1999.

[5] Some of the modifications for SNFs under the BBRA include a 16.66% increase in the federal prospective payment for the SNF nursing components, and elimination of the following: a reduction in the FY01 SNF market basket inflation adjuster, consolidated billing for all Part B services, except therapy services, and the targeted 20% payment "add-ons" for three specific RUGS-III (therapy) categories in order to equally target all 14 rehabilitation RUG classifications by increasing the federal rate for each classification 6.7%. It also required SNFs to visibly post the accurate number of licensed and unlicensed nursing staff by 2003[5] and identified specific costly services, such as, prosthetics and certain chemotherapy classes to be reimbursed retrospectively. (Pelovitz, Steven, Director, Survey and Certification Group of the Health Care Financing Administration. Testimony on Nursing Home Bankruptcies before the Senate Special Committee on Aging. September 5, 2000: p. 5 - 6.)

[6] For home health agencies, the BBRA provided some clarification in the definition of "home bound patients", allowing these clients to attend adult day care without losing their benefits. BIPA provided a one year delay in federal funding cuts of 15% and a 10% "add-on" in reimbursement rates for all rural home health providers (to sunset in October 2002). BIPA also instituted a 2.2% increase in the PPS rates.

[7] In examining the elderly population being served by SNFs and HHC, we acknowledge that this report does not provide a complete picture. Approximately 35% and 40% of patients are referred to SNFs and home under HHC, from sources other than acute hospitals, such as other SNFs or physician referral.

Figure 1: Disposition of all Elderly Patients Discharges from Acute Hospitals in MA, '96 and '00



What Does the Massachusetts Long-Term Care Industry Look Like?

The Massachusetts long-term care industry looks slightly different than the national market. Massachusetts elderly, age 65 and older, comprise 14% of the total state population, slightly higher than the national average of 12.7%.[8] Among those over 74 years of age, the disparity with the national average is even greater.

Compared to the nationwide average, there is a greater reliance on SNFs in Massachusetts. In 1998, Massachusetts had 54 Medicare-certified SNFs per 100,000 beneficiaries, compared to a national average of 39 Medicare-certified SNFs. In fact, between 1996 and 2000, the number of Level I beds (i.e., Medicare licensed) in SNFs doubled.[9] This is an interesting finding since the nursing home industry has experienced a number of facility and bed closures since 1997.

Massachusetts also had more Medicare home health users as a percent of all beneficiaries and a greater utilization of Medicare home health visits per person than the national averages. Despite the slightly higher home health utilization, by 2000 there were slightly fewer Medicare-certified home health agencies per 100,000 beneficiaries compared to the national average.[10]

The Balanced Budget Act of 1997

The implementation of the BBA sparked concern that the average patient mix could be influenced because payments would be higher for less-acute patients and lower for more acute patients, straining an already financially tenuous industry. Prior to the BBA, Medicare utilized a cost-based reimbursement system, whereby payments were made to providers based on the specific services rendered to the Medicare beneficiary. In an attempt to control rising costs, the federal government replaced the fee-for-service system with a prospective payment system (PPS) that allocates fixed reimbursements, based on the patient's individual characteristics and needs (i.e., diagnosis and acuity). The PPS allocates a per diem payment for the patient based on their Resource Utilization Groups (RUG) classification, a case-mix adjusted system created by CMS, formerly known as HCFA. The per diem payment rates are based on 1995 SNF costs, adjusted for case-mix and regional differences and updated annually.

The Impact of the Balanced Budget Act on the Long-Term Care Industry

In a report on access to SNFs under PPS, the General Accounting Office (GAO) concluded that access to care for higher-acuity patients could be jeopardized due to inadequate reimbursement rates for specific RUG classifications.[11] The Department of Health and Human Service's Office of Inspector General also surveyed hospital discharge planners and nursing home administrators on the PPS's effects on access to SNFs. The survey results supported the GAO's conclusions that providers have had to make adjustments, but access has not been compromised. The majority of nursing home administrators report that the PPS has resulted in admission practice

[8] CMS (formally HCFA). www.hcfa.gov/stats/nhe-oact/stateestimates/article98/t1.htm
[9] DHCFP, Health Care Finance (HCF-1) reports.
[10] AARP, Reforming the Health Care System: State Profiles 2000.
[11] GAO.

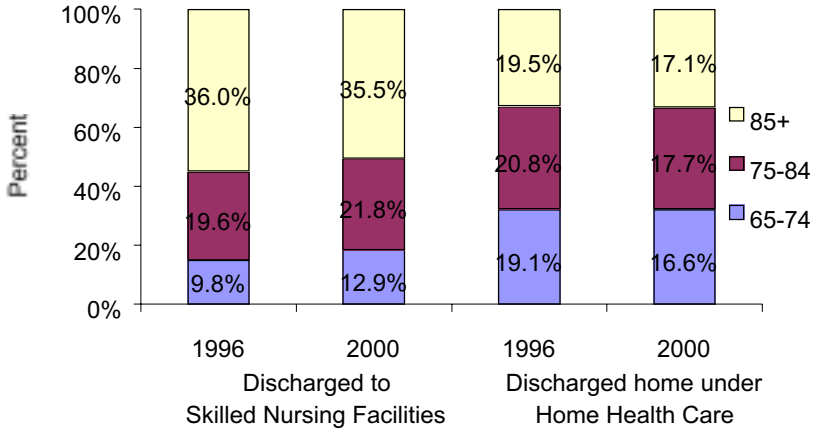
changes, specifying that a patient's acuity/medical needs assessment now carries greater importance in admission. Supporting these findings, 56% of hospital discharge planners surveyed reported experiencing delays in placement due to the PPS, especially among higher-acuity patients. Despite these claims, Medicare data does not indicate changes in placement. While there was no indication that PPS was negatively impacting access to SNFs as of the 1999 report, the IOG strongly cautioned that, in the future, admission changes could affect beneficiaries with specific medical conditions.

Demographic Findings

Age

Between 1996 and 2000, the median age of patients discharged to SNFs from acute hospitals has remained steady at 82 years of age. During the same period, the median age of elderly discharged to home under HHC rose slightly from 77 to 78 years of age. **(See Figure 2)**

Figure 2: Percent of All Elderly Discharges by Disposition and Age Category, '96-'00



- Between 1996 and 2000, the percent of elderly discharged to SNFs rose for elderly ages 65 to 74 and has remained the same for those 85+.
- The increase in admissions for the younger elders, 65 to 74 years old, is likely for short-term rehabilitative services, such as, services needed after a limb fracture or replacement. Such patients rehabilitate, then are generally discharged unless SNF placement is needed for other impairments.
- The percentage of elderly discharged to home under HHC from acute hospitals during this same period has decreased across all elderly age groups.
- Seniors, 75 years and older, are now more likely to be discharged to SNFs than home under home health agencies.

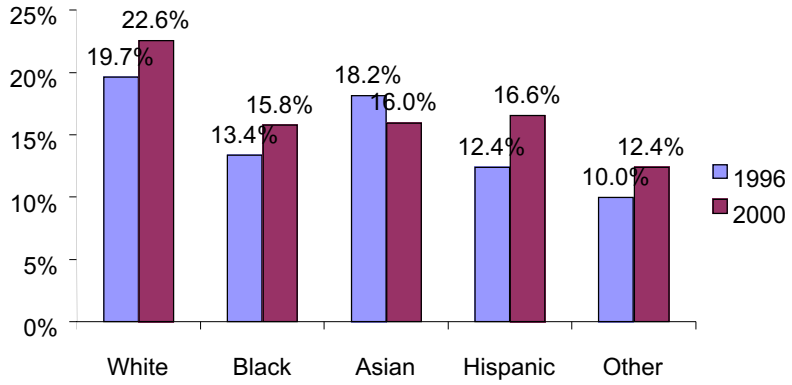
Gender

As a whole, the elderly population consists of more females than males, so it follows that more females than males are discharged from acute hospitals. The difference between the percent of males and females discharged to SNFs could be attributed to age and acuity. It is widely known that most elder women outlive their male partners and when they require additional care SNFs are often the only source of care available.

Race

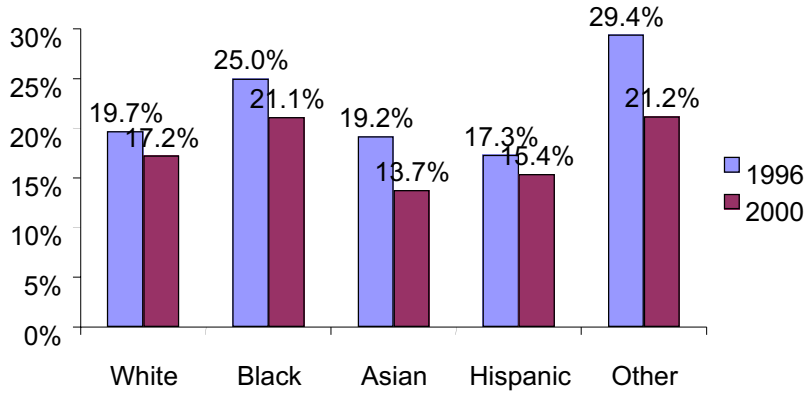
Between 1996 and 1999, the percent of elderly discharged to SNFs increased within each race and ethnic population: white, black, Asian and Hispanic. Conversely, the percent of patient discharges to home under HHC decreased for all race and ethnic populations during the same time period. **(See Figures 3 and 4)**

Figure 3: All Elderly Patient Discharges from Acute Hospitals to SNFs by Race, '96 and '00



- Between 1996 and 2000, the percent of elderly discharged to SNFs increased across the white, black and Hispanic populations.
- The Hispanic population experienced the largest growth, increasing from 12% in 1996 to 17% by 2000.
- Between 1996 and 2000, the percent of discharged home under home health care decreased across all race or ethnic populations, with the Asian population experiencing the largest decrease from 19.2% to 13.7% in 2000.

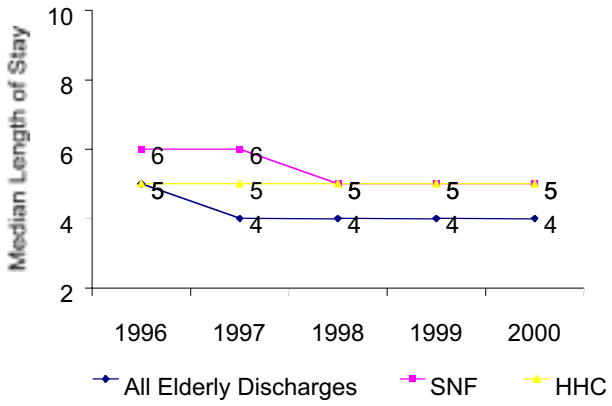
Figure 4: All Elderly Patient Discharges from Acute Hospitals to home under HHC by Race, '96 and '00



Hospitalization Characteristics

Length of Stay

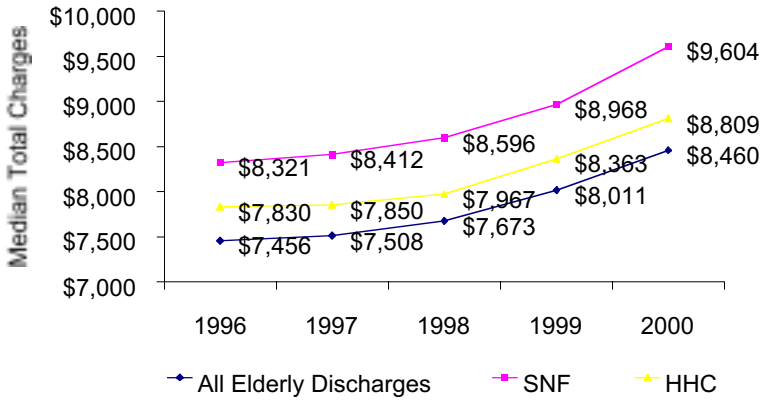
Figure 5: Median Length of Stay for All Elderly Discharged to SNFs and home under HHC, '96-'00



- Median length of stay for patients discharged to SNFs from acute hospitals fell from 6 days to 5 days between 1997 and 1998. This indicates that hospitals are shifting patients to SNFs sooner.
- During this same period, median length of stay for patients discharged to home under HHC remained unchanged at 5 days**.**
- Compared with all elderly discharges, the median length of stay is somewhat longer for those discharged to SNFs or home under HHC as would be expected due to their higher levels of acuity and care requirements, as well as the time required to arrange for appropriate placement (referred to as administratively necessary days).

Total Charges

Figure 6: Median Total Charges for All Elderly Discharged to SNFs and home under HHC, '96-'00



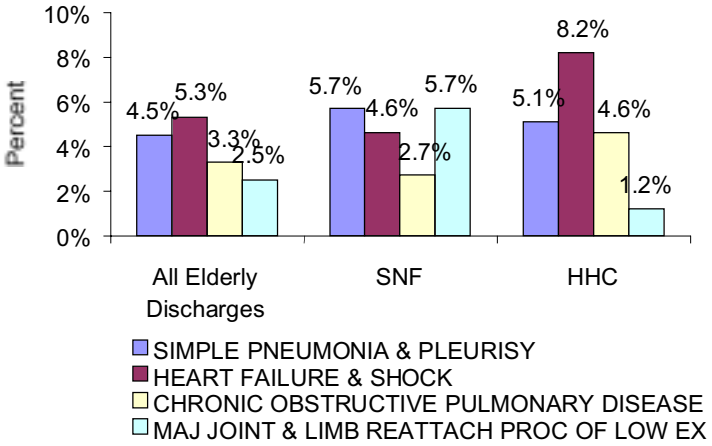
- While the median total charges for elderly discharged to SNFs has been consistently 6% to 7% higher than for those patients discharged to home under HHC, the percent difference increased to 8% in 2000.

Clinical Attributes

Disease-Related Groups (DRGs)[12]

Data from the HDD dataset revealed that the largest percent of Medicare patients discharged to SNFs and home under HHC for post-acute care shared one of four common DRGs: heart failure and shock, simple pneumonia and pleurisy, chronic obstructive pulmonary disease and major joint and limb reattachment procedures of lower extremities. **(See Figure 7)**

Figure 7: Percent of All Elderly Discharges by Common Disease-Related Groups (DRGs) and Disposition, 2000



- Heart Failure and Shock is the most common diagnosis among all elderly discharged from acute hospitals.
- Elderly patients diagnosed with Heart Failure and Shock are much more likely to be discharged to home under HHC than to SNFs.
- Elderly patients diagnosed with Major Joint and Limb Reattachment are much more likely to be discharged to SNFs than to home under HHC, due to the need for intensive rehabilitation.
- Elderly patients diagnosed with COPD are more likely to be discharged home under HHC than to SNFs.

Table 2: Total Acute Hospital Elderly Discharges to SNFs and HHCare by Common Diagnoses, 2000

	SNFs		Home Health		Total
Total Number of Elderly Acute Hospital Discharges	60,782	22.0%	47,586	17.2%	276,715
Chronic Obstructive Pulmonary Disease (COPD)	1,649	18.1%	2,165	23.8%	9,116
Heart Failure and Shock	2,802	19.1%	3,895	26.5%	14,712
Major Joint & Limb Reattach. of Lower Extremities	3,452	49.2%	563	8.0%	7,017
Simple Pneumonia and Pleurisy	3,460	28.0%	2,417	19.5%	12,375

The following findings on discharged elderly analyze their diagnosis (i.e., DRG) class by age, race, and sex to identify which characteristics distinguish a patient discharged to a SNF versus a patient discharged home under HHC.

[12] 3M's AP-DRG, Version 12.

Heart Failure and Shock [DRG 127]

- The number of elderly patients discharged from an acute hospital with a diagnosis of heart failure and shock decreased by 3.4% between 1996 and 2000.
- In 2000, the percent of patients diagnosed with heart failure and discharged to SNFs only increased among those ages 75 to 84.
- During this same time period, elderly patients with heart failure discharged home under HHC increased across among elderly ages 75+.

	SNF Patient	HHC Patient
Median Age	84	81
Gender	Female	Female
Race	White	White
Median Length of Stay	4	4
Median Total Hospital Charges	$7,137	$6,593

Simple Pneumonia and Pleurisy [DRG 089]

- Between 1996 and 2000, the number of elderly discharged from an acute hospital with simple pneumonia and pleurisy rose by 39%.
- By 2000, the percent of elderly patients discharged to SNFs with simple pneumonia rose slightly for those under 85 years of age and decreased for those 85 and older.
- Conversely, elderly patients with simple pneumonia discharged to home under HHC decreased for those under 75 years of age and increased for the 75+ elderly populations.

	SNF Patient	HHC Patient
Median Age	84	80
Gender	Female	Female
Race	White	White
Median Length of Stay	5	5
Median Total Hospital Charges	$7,374	$7,374

Major Joint and Limb Reattachment [DRG 209]

- Slightly more elderly patients were discharged with a diagnosis of major joint and limb attachment in 2000, increasing 4.3% since 1996.
- Between 1996 and 2000, almost 50% of all elderly patients with major joint and limb reattachment procedures of lower extremities were discharged to SNFs. Yet, the percent of elderly patients with this procedure discharged to SNFs only increased for those under 75 years of age.
- During this same time, the percent of elderly with this procedure discharged home under home health decreased by over 25%.

	SNF Patient	HHC Patient
Median Age	77	72
Gender	Female	Female
Race	White	White
Median Length of Stay	4	4
Median Total Hospital Charges	$18,189	$21,608

Chronic Obstructive Pulmonary Disease (COPD) [DRG 088]

- A larger number of elderly patients were discharged with a diagnosis of COPD in 2000, a 21.2% increase from 1996.
- Between 1996 and 2000, the percent of elderly patients discharged to SNFs with COPD rose among those under 75 years of age, decreasing slightly for the 75+ elderly.
- Conversely, the percent of elderly with COPD discharged home under home health decreased among those under 75 years of age, increasing slightly for the 75+ elderly populations.

	SNF Patient	HHC Patient
Median Age	79	77
Gender	Female	Female
Race	White	White
Median Length of Stay	5	4
Median Total Hospital Charges	$6,868	$6,403